

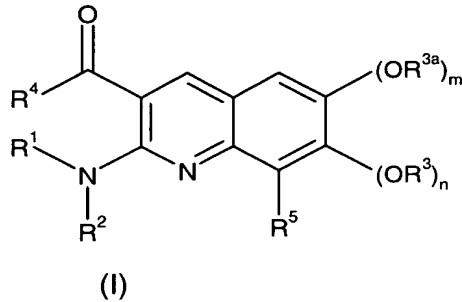
Amendments To The Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application:

In the Claims:

What is claimed is:

Claim 1(Original): A compound of Formula (I):



wherein:

R¹ is -H or C₁-C₆ alkyl;

R² is the group defined by -(Q)_q-(Q¹)_r-(Q²),

wherein:

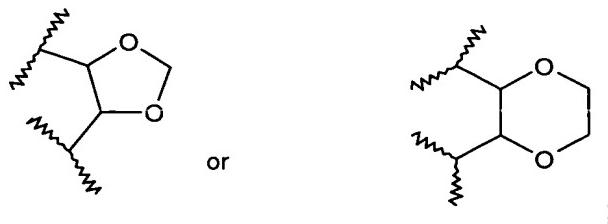
Q is CH₂ and q is 0, 1, 2, 3, or 4;

Q¹ is O, NH, or C(H)(R') where R' is -OH; and r is 0 or 1, and

Q² is -H, C₁-C₆ alkyl, aryl, heterocyclic, C₃-C₇ cycloalkyl, -C(O)OR^b, NR^bR^b, or heteroaryl; where Q² is optionally substituted with at least one R^a group;

R³ and R^{3a} are independently selected from -H, C₁-C₆ alkyl, or C₁-C₆ hydroxyalkyl, m is 0 or 1, and n is 0 or 1, or

m is 1 and n is 1 and R³ and R^{3a} together with the atoms to which they are attached form the optionally substituted fused ring



R^4 is $-OH$, $-NHS(O)_2R^c$, or $-N(R^b)R$;

R^5 is $-H$ or halo;

R is $-H$, aryl, $-OR^b$;

R^a is independently selected from $C_1.C_6$ alkyl, halo, aryl, $-C(O)OR^b$, $-C(O)R^d$, $-OH$, $-NR^bR^b$, $-N(H)C(O)OR^b$, $-N(H)C(O)N(H)R^e$, $-N(H)S(O)_2R^c$, $-N(H)S(O)_2NR^bR^b$, C_1-C_6 alkoxy, C_1-C_6 haloalkyl, $-NO_2$, $-CN$, $-SF_5$, $=O$, $-S(O)_2NR^bR^b$, or aryloxy;

R^b is $-H$, $C_1.C_6$ alkyl, or $C_2.C_4$ alkenyl;

R^c is aryl or $C_1.C_6$ alkyl;

R^d is $C_1.C_6$ alkyl, aryl, NR^bR^b , or $N(H)(CH_2)_sNR^bR^b$,

R^e is $-H$, aryl or $C_1.C_6$ alkyl;

s is 1, 2, 3, or 4;

or a pharmaceutically acceptable salt or solvate thereof.

Claim 2 (Original): A compound as claimed in claim 1, selected from the group consisting of:

2-(3-tert-butoxycarbonylamino-propylamino)-7-methoxy-quinoline-3-carboxylic acid;

2-(3-amino-propylamino)-7-methoxy-quinoline-3-carboxylic acid;

2-[2-(4-tert-butoxycarbonyl-piperazin-1-yl)-ethylamino]-7-methoxy-quinoline-3-carboxylic acid;

2-(4-tert-butoxycarbonylamino-butyl
amino)-7-methoxy-quinoline-3-carboxylic acid;

2-(2-tert-butoxycarbonylamino-ethyl

amino)-7-methoxy-quinoline-3-carboxylic acid;
2-(3-dimethylamino-propylamino)-7-methoxy-quinoline-3-carboxylic acid;
2-(2-dimethylamino-ethylamino)-7-methoxy-quinoline-3-carboxylic acid;
2-(2-amino-ethylamino)-7-methoxy-quinoline-3-carboxylic acid;
2-(4-amino-butylamino)-7-methoxy-quinoline-3-carboxylic acid;
2-benzylamino-7-methoxy-quinoline-3-carboxylic acid;
7-methoxy-2-phenethylamino-quinoline-3-carboxylic acid;
7-methoxy-2-(2-pyridin-4-yl-ethylamino)-quinoline-3-carboxylic acid;
2-(2-dimethylamino-ethylamino)-7-methoxy-quinoline-3-carboxylic acid;
2-(indan-2-ylamino)-7-methoxy-quinoline-3-carboxylic acid;
7-methoxy-2-(3-morpholin-4-yl-propylamino)-quinoline-3-carboxylic acid;
2-(3-diethylamino-propylamino)-7-methoxy-quinoline-3-carboxylic acid;
7-methoxy-2-[3-(2-oxo-pyrrolidin-1-yl)-propylamino]-quinoline-3-carboxylic acid;
2-(4-tert-butyl-benzylamino)-7-methoxy-quinoline-3-carboxylic acid;
7-methoxy-2-[2-(2-oxo-imidazolidin-1-yl)-ethylamino]-quinoline-3-carboxylic acid;
2-(4-dimethylamino-benzylamino)-7-methoxy-quinoline-3-carboxylic acid;
7-methoxy-2-(2-morpholin-4-yl-ethylamino)-quinoline-3-carboxylic acid;
7-methoxy-2-[2-(4-phenoxy-phenyl)-ethylamino]-quinoline-3-carboxylic acid;
2-cyclohexylamino-7-methoxy-quinoline-3-carboxylic acid;
7-methoxy-2-[(tetrahydro-furan-2-ylmethyl)-amino]-quinoline-3-carboxylic acid;
2-(2-hydroxy-ethylamino)-7-methoxy-quinoline-3-carboxylic acid;
2-(2-hydroxy-2-phenyl-ethylamino)-7-methoxy-quinoline-3-carboxylic acid;
2-[2-(3-bromo-4-methoxy-phenyl)-ethylamino]-7-methoxy-quinoline-3-carboxylic acid;
7-methoxy-2-(4-methyl-benzylamino)-quinoline-3-carboxylic acid;
7-methoxy-2-(2-pyridin-3-yl-ethylamino)-quinoline-3-carboxylic acid;
2-[2-(3,4-dimethoxy-phenyl)-ethylamino]-7-methoxy-quinoline-3-carboxylic acid;
2-benzylamino-7-methoxy-quinoline-3-carboxylic acid;
7-methoxy-2-(3-morpholin-4-yl-propylamino)-quinoline-3-carboxylic acid; and
7-methoxy-2-piperidin-1-yl-quinoline-3-carboxylic acid;

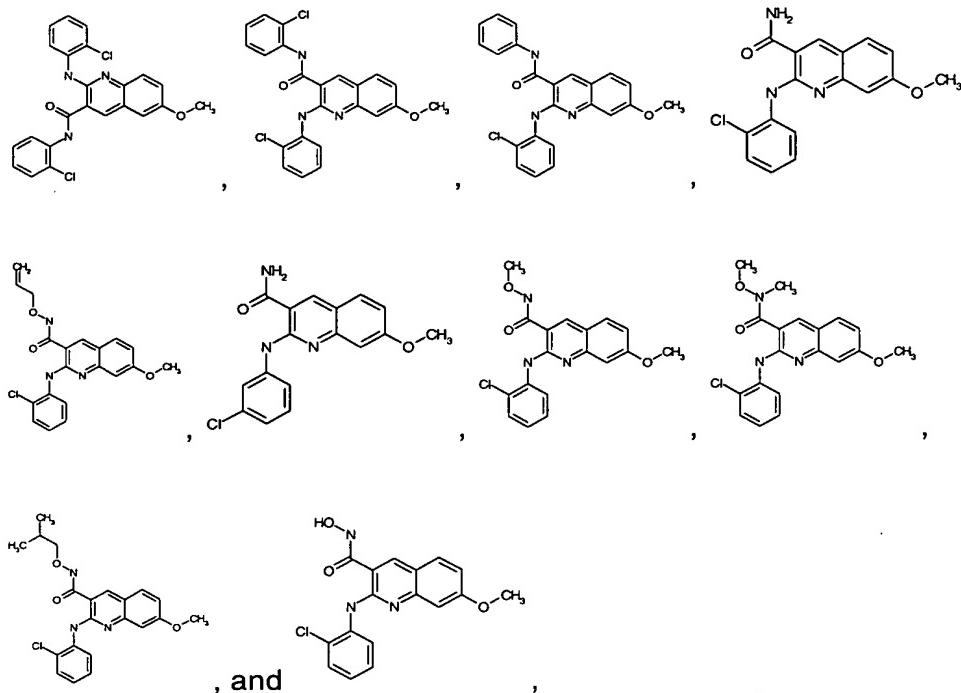
7-methoxy-2-(3-pentafluorosulfanyl-phenylamino)-quinoline-3-carboxylic acid;
7-methoxy-2-(5,6,7,8-tetrahydro-naphthalen-1-ylamino)-quinoline-3-carboxylic acid;
7-methoxy-2-(naphthalen-1-ylamino)-quinoline-3-carboxylic acid;
2-[4-(2-diethylamino-ethylcarbamoyl)-phenylamino]-7-methoxy-quinoline-3-carboxylic acid;
2-(3-tert-butoxycarbonylamino-benzylamino)-7-methoxy-quinoline-3-carboxylic acid;
2-(4-tert-butoxycarbonylamino-benzylamino)-7-methoxy-quinoline-3-carboxylic acid;
2-(4-amino-benzylamino)-7-methoxy-quinoline-3-carboxylic acid;
7-methoxy-2-(2,4,6-trimethoxy-benzylamino)-quinoline-3-carboxylic acid;
7-methoxy-2-[3-(3-phenyl-ureido)-benzylamino]-quinoline-3-carboxylic acid;
7-methoxy-2-[4-(3-phenyl-ureido)-benzylamino]-quinoline-3-carboxylic acid;
7-methoxy-2-[4-(toluene-4-sulfonylamino)-benzylamino]-quinoline-3-carboxylic acid;
7-methoxy-2-(3-ureido-benzylamino)-quinoline-3-carboxylic acid;
2-(dimethylaminosulfonylamino-benzylamino)-7-methoxy-quinoline-3-carboxylic acid;
7-methoxy-2-[2-(4-methoxy-phenyl)-ethylamino]-quinoline-3-carboxylic acid;
7-methoxy-2-[2-(2-methoxy-phenyl)-ethylamino]-quinoline-3-carboxylic acid;
7-methoxy-2-(4-methoxy-benzylamino)-quinoline-3-carboxylic acid;
2-[(benzo[1,3]dioxol-5-ylmethyl)-amino]-7-methoxy-quinoline-3-carboxylic acid;
7-methoxy-2-(3-trifluoromethyl-benzylamino)-quinoline-3-carboxylic acid;
7-methoxy-2-[2-(4-nitro-phenyl)-ethylamino]-quinoline-3-carboxylic acid;
2-(3-imidazol-1-yl-propylamino)-7-methoxy-quinoline-3-carboxylic acid;
7-methoxy-2-(4-sulfamoyl-benzylamino)-quinoline-3-carboxylic acid;
7-methoxy-2-(3-methoxy-benzylamino)-quinoline-3-carboxylic acid;
2-(2-chloro-benzylamino)-7-methoxy-quinoline-3-carboxylic acid;
2-[2-(3-fluoro-phenyl)-ethylamino]-7-methoxy-quinoline-3-carboxylic acid;
2-[2-(4-amino-phenyl)-ethylamino]-7-methoxy-quinoline-3-carboxylic acid;
2-(3-amino-benzylamino)-7-methoxy-quinoline-3-carboxylic acid;

2-(2-benzo[1,3]dioxol-5-yl-ethylamino)-7-methoxy-quinoline-3-carboxylic acid;
7-methoxy-2-[2-(3-methoxy-phenyl)-ethylamino]-quinoline-3-carboxylic acid;
2-[2-(3-chloro-phenyl)-ethylamino]-
7-methoxy-quinoline-3-carboxylic acid;
7-methoxy-2-[2-(4-sulfamoyl-phenyl)-ethylamino]-quinoline-3-carboxylic acid;
2-[2-(2-chloro-phenyl)-ethylamino]-7-methoxy-quinoline-3-carboxylic acid;
2-[2-(4-hydroxy-phenyl)-ethylamino]-7-methoxy-quinoline-3-carboxylic acid;
2-(3-bromo-benzylamino)-7-methoxy-quinoline-3-carboxylic acid;
2-(3-chloro-benzylamino)-7-methoxy-quinoline-3-carboxylic acid;
7-methoxy-2-(2-piperazin-1-yl-ethylamino)-quinoline-3-carboxylic acid;
7-methoxy-2-[2-(1-methyl-pyrrolidin-2-yl)-ethylamino]-quinoline-3-carboxylic
acid;
7-methoxy-2-piperidin-1-yl-quinoline-3-carboxylic acid;
2-(4-chloro-benzylamino)-7-methoxy-
quinoline-3-carboxylic acid;
2-(4-hydroxy-piperidin-1-yl)-7-methoxy-quinoline-3-carboxylic acid;
2-(tert-butoxycarbonylmethyl-amino)
-7-methoxy-quinoline-3-carboxylic acid;
2-[2-(2-hydroxy-ethoxy)-ethylamino]-7-methoxy-quinoline-3-carboxylic acid;
7-methoxy-2-(3-methoxy-propylamino)-quinoline-3-carboxylic acid;
7-methoxy-2-(2-methoxy-ethylamino)-quinoline-3-carboxylic acid;
2-(3-hydroxy-propylamino)-7-methoxy-quinoline-3-carboxylic acid;
2-(2-carboxy-ethylamino)-7-methoxy-
quinoline-3-carboxylic acid;
7-methoxy-2-propylamino-quinoline-3-carboxylic acid;
2-(carboxymethyl-amino)-7-methoxy-quinoline-3-carboxylic acid;
3-(2-chloro-phenylamino)-6-methoxy-naphthalene-2-carboxylic acid;
2-(2-chloro-phenylamino)-7-methoxy-quinoline-3-carboxylic acid phenylamide;
2-(2-chloro-phenylamino)-7-hydroxy-quinoline-3-carboxylic acid phenylamide;
2-(2-chloro-phenylamino)-7-hydroxy-quinoline-3-carboxylic acid;
2-(2-chloro-phenylamino)-7-(2-hydroxy-ethoxy)-quinoline-3-carboxylic acid;
2-(3,4-dichlorophenylamino)-7-methoxy-quinoline-3-carboxylic acid;
2-(3-biphenylamino)-7-methoxy-quinoline-3-carboxylic acid;
7-methoxy-2-(phenylamino)-quinoline-3-carboxylic acid;
7-methoxy-2-(methyl-3-methylphenylamino)-quinoline-3-carboxylic acid;

2-(cyclohexylamino)-7-methoxy-quinoline-3-carboxylic acid;
2-(3-chlorophenylamino)-6,7-dimethoxy-quinoline-3-carboxylic acid;
2-(3-chlorophenylamino)-6,7-methylenedioxy-quinoline-3-carboxylic acid;
2-(3-chlorophenylamino)-7-hydroxy-quinoline-3-carboxylic acid;
8-bromo-2-(3-chlorophenylamino)-7-hydroxy-quinoline-3-carboxylic acid;
2-(3-chlorophenylamino)-7-methoxy-quinoline-3-carboxamide
phenylsulphonamide;
2-(3-chlorophenylamino)-7-methoxy-quinoline-3-carboxamide 2-nitro-
phenylsulphonamide;
2-(3-chlorophenylamino)-7-methoxy-quinoline-3-carboxamide
methylsulphonamide;
8-bromo-2-(3-chlorophenylamino)-7-methoxy-quinoline-3-carboxylic acid;
2-(3-acetophenylamino)-7-methoxy-quinoline-3-carboxylic acid;
2-(2-benzophenone-yl-amino)-7-methoxy-quinoline-3-carboxylic acid;
2-(2-fluoro-5-methylphenylamino)-7-methoxy-quinoline-3-carboxylic acid;
2-(2-cyanophenylamino)-7-methoxy-quinoline-3-carboxylic acid;
2-(2-chloro-6-methylphenylamino)-7-methoxy-quinoline-3-carboxylic acid;
2-(4-carboxybenzylamino)-7-methoxy-quinoline-3-carboxylic acid;
2-(3-chloro-6-methoxyphenylamino)-7-methoxy-quinoline-3-carboxylic acid;
2-(2-ethylphenylamino)-7-methoxy-quinoline-3-carboxylic acid;
7-methoxy-2-(4-nitrophenylamino)-quinoline-3-carboxylic acid;
2-(4-carboxamidophenylamino)-7-methoxy-quinoline-3-carboxylic acid;
7-methoxy-2-(4-hydroxyphenethylamino)- quinoline-3-carboxylic acid; and
7-methoxy-2-(piperidin-4-ol)- quinoline-3-carboxylic acid;

or a salt, solvate, or physiologically functional derivative thereof.

Claim 3 (Original): A compound as claimed in claim 1, selected from the group consisting of:



or a salt, solvate, or physiologically functional derivative thereof.

Claim 4 (Currently Amended): A pharmaceutical composition, comprising: a therapeutically effective amount of a compound as claimed in ~~any one of claims~~ claim 1 to 3, or a salt, solvate, or a physiologically functional derivative thereof and one or more of pharmaceutically acceptable carriers, diluents and excipients.

Claim 5 (Currently Amended): A method of treating a disorder in a mammal, said disorder being mediated by inappropriate YAK3 activity, comprising: administering to said mammal a therapeutically effective amount of a compound as claimed in ~~any one of claims~~ claim 1 to 3, or a salt, solvate, or a physiologically functional derivative thereof.

Claim 6-7 (Cancelled):

Claim 8 (New): A compound as claimed in claim 1, wherein R¹ is -H or methyl.

Claim 9 (New): A compound as claimed in claim 1, wherein R¹ is -H.

Claim 10 (New): A compound as claimed in claim 1, wherein q and r are 0, and R² is -(Q²).

Claim 11 (New): A compound as claimed in claim 1, wherein q is 1, 2, 3, or 4, r is 0 and R² is -(Q)_q-(Q²).

Claim 12 (New): A compound as claimed in claim 1, wherein q is 0, r is 1, and R² is -(Q¹)-(Q²).

Claim 13 (New): A compound as claimed in claim 1, wherein q is 1, 2, 3, or 4 and r are 1, and R² is -(Q)_q-(Q¹)-(Q²).

Claim 14 (New): A compound as claimed in claim 1, wherein q is 1, 2, 3, or 4 and Q is CH₂.

Claim 15 (New): A compound as claimed in claim 1, wherein q is 1, 2, or 3 and Q is CH₂.

Claim 16 (New): A compound as claimed in claim 1, wherein q is 1 or 2 and Q is CH₂.

Claim 17 (New): A compound as claimed in claim 1, wherein r is 0 or 1 and Q¹ is NH or O.

Claim 18 (New) A compound as claimed in claim 1, wherein r is 0 or 1 and Q¹ is NH.

Claim 19 (New) A compound as claimed in claim 1, wherein r is 0.

Claim 20 (New): A compound as claimed in claim 1, wherein Q² is C₁-C₆ alkyl, aryl, heterocyclic, C₃-C₇cycloalkyl, or heteroaryl each optionally substituted with at least one R^a group.

Claim 21 (New): A compound as claimed in claim 1, wherein Q² is aryl optionally substituted with at least one R^a group.

Claim 22 (New): A compound as claimed in claim 1, wherein Q is CH², q is 1, 2, 3, or 4, r is 0, and Q² is aryl optionally substituted with at least one R^a group.

Claim 23 (New): A compound as claimed in claim 1, wherein Q is CH², q is 1, 2, or 3, r is 0, and Q² is phenyl optionally substituted with at least one R^a group.

Claim 24 (New): A compound as claimed in claim 1, wherein Q is CH², q is 2, r is 0, and Q² is phenyl optionally substituted with at least one R^a group.

Claim 25 (New) A compound as claimed in claim 1, wherein q is 0, r is 0, and Q² is aryl optionally substituted with at least one R^a group.

Claim 26 (New): A compound as claimed in claim 1, wherein q is 0, r is 0, and Q² is phenyl optionally substituted with at least one R^a group.

Claim 27 (New) A compound as claimed in claim 1, wherein q is 0, r is 0, and Q² is C₁-C₆ alkyl optionally substituted with at least one R^a group.

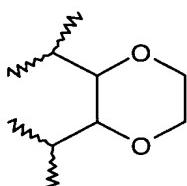
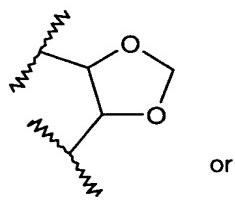
Claim 28 (New): A compound as claimed in claim 1, wherein m is 0, n is 1, and R³ is -H or C₁-C₆ alkyl.

Claim 29 (New): A compound as claimed in claim 1, wherein m is 0, n is 1, and R³ is -H or methyl.

Claim 30 (New): A compound as claimed in claim 1, wherein m is 1, n is 0, and R^{3a} is -H or C₁-C₆ alkyl.

Claim 31 (New) A compound as claimed in claim 1, wherein m is 1, n is 0, and R^{3a} is -H or methyl.

Claim 32 (New): A compound as claimed in claim 1, wherein m is 1 and n is 1 and R³ and R^{3a} together with the atoms to which they are attached form the optionally substituted fused ring



Claim 33 (New): A compound as claimed in claim 1, wherein R⁴ is -NHS(O)₂R^c, wherein R^c is aryl or C₁-C₆ alkyl.

Claim 34 (New): A compound as claimed in claim 1, wherein R^c is phenyl, substituted phenyl or methyl.

Claim 35 (New): A compound as claimed in claim 1, wherein R⁴ is -OH.

Claim 36 (New): A compound as claimed in claim 1, wherein R⁴ is -N(R^b)R wherein R is -H, aryl or -OR^b and R^b is -H, C₁-C₆ alkyl, or C₁-C₆ alkenyl.

Claim 37 (New): A compound as claimed in claim 1, wherein R⁵ is halo.

Claim 38 (New): A compound as claimed in claim 1, wherein R⁵ is -Br.

Claim 39 (New): A compound as claimed in claim 1, wherein R⁵ is -H.